April 26, 1950.

Dr. L. F. Leloir, Instituto de Investigaciones Bioquimicas, Fundacion Campomar, J. Alvarez 1719, Basnos Aires, Argentina.

Dear Dr. Leloir:

For some time, I have been following with great interest the work of yourself and your colleagues on the metabolism of carbohydrates by microorganisms. As I am rather doubtful that I have been able to notice all of this work as it has been published, I beg your favor in placing my name on the mailing list of your Instituto, for reprints of publications dealing with this subject.

I enclose a reprint of some work done collaboratively with Dr. Doudoroff whichshows the direction of our interests.

You may be interested in a small experimental item that may be useful to any further investigations you may be contemplating on lactase or galactosidase. I have been studying this enzyme in E. coli, but have abandoned the use of lactose as substrate, as giving results much too imprecise. Instead, the compound — o-nitrophenyl-D-galactoside, prepared by coupling nitrophenol with acetobrom-galactose, serves as a very delicate substrate for assay. The galactoside is essentially colorless, but is split by galactosidase to yield o-nitrophenol, which is measured in alkaline solution at 4200 Å. in a spectrophotmeter or colorimeter. I am preparing a manuscript describing the method, but mention it in case you are contemplating further studies on this enzyme in the near future.

Yours sincerely,

Joshua Lederberg
Assistant Professor of Genetics